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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/498,701 02/07/00 TROST B 8603-0190.2

HM12/1211

EXAMINER

DESAI, R

ART UNIT PAPER NUMBER

1625

DATE MAILED:

12/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No. 09/498,701	Applicant(s) Trost et al
Examiner Rita Desal	Group Art Unit 1625

Responsive to communication(s) filed on Oct 20, 2000

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle 935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

### Disposition of Claim

Claim(s) 17-21, 23, 53, 54 and 56 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 17-21, 23, 53, 54 and 56 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 1625

## **DETAILED ACTION**

### ***Response to Amendment***

Claims pending are 17-23 and 53-56.

Response to the claims 17 and 55 rejection under *35 U.S.C. 112 first para rejection*.

Claims 17 has been amended and claim 55 has been canceled.

The rejection of claim 17 , 55 and 57 *still stands* since the applicants have amended to include only generic terms without specifying the specific enabled ones. The 5-7 membered heterocyclic ring with upto 1-6 Carbon atoms and other as non-hetero atom such as a Nitrogen or Oxygen is not enabled. Hetero rings with 1 carbon and 5 Oxygen or Nitrogen are not known to exist as stable compounds!

The only hetero ring exemplified is pyridyl ring. The scope of the claims encompass numerous combination of hetero atoms and catalytic chemistry art is very specific, to include any and all heterocyclic rings with their different geometric planar and properties to be enabled and effective.

Applicant is required to amend the claims to include only the specified exemplified groups.

The claims 17, 20-23 and 55 rejected under *35 U.S.C. 112 second para* still stands rejected since even though the applicants have amended the claims, they have not amended the claims to specify and distinctly claims. The claims are still ambiguous claiming any nonprotic solvents

Art Unit: 1625

and any 5-7 membered ring with 1-6 Carbon ring atoms, with remaining atoms being Oxygen or Nitrogen.

Claims 17-23 and 53-56 rejected under 35 U.S.C. 103(a) as being unpatentable over Barry Trost et al J.Am. Chem. Soc. 1990 , Vol 112 pages 9590-9600; Barry Trost et al, Regiochemical diversity... , pages 4817-4840; Barry Trost et al J.Am. Chem Soc 1987 , Vol 109. Pages 1469-1478, and Barry M. Trost Organometallics 1985, Vol 4 pages 1143-1145 *still stands.*

Barry Trost in Chemoselectivity and stereocontrol teaches a catalytic composition , in a solvent (toluene) using an hexacoordinated Mo attached to an heteroring (bipyridyl, ) , See whole document see pages 1472, reaction 17, formula 39, 40 , reaction 20 , 21 and 22 on page 1473, 47, 48, 49 on page 1474 reaction 24,25 which use Mo(o) .

Barry Trost in Regiochemical diversity also teaches the above components of an catalytic organometallic composition. (See whole document)

Barry Trost in Ligand dependence of Mo-catalyzed alkylation uses Molybdenum -isonitrile complexes ( limitation of claim 19).

All these references us a Molybdenum catalyst only. The instant claims use Tungsten and Chromium also.

Art Unit: 1625

Barry Trost and Dennis Murphy Organometallics , 1985 teaches the need of chiral and optically active ligands. The reference also teaches 1,1'-binaphthol which is a limitation of claim 55. The reference also teaches allylic alkylation involving chiral allyl fragments bound to chiral metal templates and also a chiral ligand derived from a diol substituted by an -O-. It also uses the same solvent THF. See formula 4,5 , middle of the column on page 1145 and the whole document.

Motivation:- One of ordinary skill in the art would have been motivated to use W or Cr since they would have a reasonable expectation of success since all these metal are from the same group VIB of the periodic table as the Mo and so should show similar properties and also the use of chiral ligands according to Organometallics Vol 4 pages 1143-1145 for the induction of asymmetry.

### *Conclusion*

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1625

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Desai whose telephone number is (703) -305-1868. The examiner can normally be reached on Monday to Friday from 8.00 am to 4.30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the supervisor, Mr. John Kight, can be reached on (703) 308-0204.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-1235 .

R.D.

Dec. 6th. 2000.

*Alan L. Rotman*  
ALAN L. ROTMAN  
PRIMARY EXAMINER